Response to the European Union Committee Energy and Environment Sub-Committee's Call for Evidence on EU Energy Governance

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Response to Case Study Two (national energy mix): Renewable energy targets

2. The October 2014 European Council agreed that the EU should cut its greenhouse gas emissions by at least 40% by 2030 compared to 1990 and that this should be delivered through a range of measures including renewable energy: "An EU target of at least 27% is set for the share of renewable energy consumed in the EU in 2030. This target will be binding at EU level." This contrasts to the 20% renewable target by 2020 which has binding national targets for each Member State.

- *How could a governance mechanism assist the EU to deliver its stated policy, including not only the 27% renewables target but the overarching 40% emissions reduction target which relies in part on the renewables target?*

1. In our research on Romania and Bulgaria we have found that governance mechanisms in the form of binding national targets played a significant role in these countries reaching their national 2020 renewable targets by 2013, seven years early. This was not an unconditional success though as support for renewable energy was withdrawn as soon as the targets were reached. Energy governance at the time was focused on facilitating the development of wind and solar projects through cost and risk shifting measures like the reallocation of risk from producers to electricity distribution companies. There was a failure to address other important issues related to energy systems in these countries. Specifically there are important systemic and technical barriers to energy system change and a transition towards a low carbon energy future. These include requiring and providing support for electricity network development and upgrade (both transmission and distribution). This incurs substantial costs, which has so far been prohibitive in terms of introducing higher levels of intermittent renewables in both countries.
2. The strategic importance of the technical inadequacy of the electricity grid (i.e. the grid capacity to carry variable wind and solar power) in both Romania and Bulgaria has led to the full reversal of all incentives introduced through EU legislation, only a few years after they came into force. Therefore a combination of hard legislation for the development and upgrade of national electricity networks is required to complement and enable existing 2030 targets. For example, this could include specifying technical standards for national electricity grids, not only in terms of compatibility with other countries but also in terms of technical performance in relation to intermittent renewables and energy demand (i.e. the introduction of smart grids technologies).

3. On the other hand countries like the UK have seen a growing interest and increase of non-traditional business models for renewable energy and energy with lower greenhouse gas emissions. These may include innovative governance mechanisms, commonly referred to as social innovations, taking the form of community energy projects and local initiatives, as well as non-traditional mixtures of public and private funding and finance. These non-traditional business models for energy projects and services tend to be non-centralised and ad-hoc, and are successful where there is local capacity to organize and/or need for the provision of energy services irrelevant of the strength of the economic case for them (i.e. driven by issues such as environmental considerations and fuel/energy poverty and vulnerability). However, such projects often struggle to sustain themselves as they rely on individuals' capacities (and could often involve volunteering) and mostly use support from local authorities.
4. Therefore, a governance mechanism which provides flexibility and support for non-traditional business models for energy services, and which builds on existing capacities at subnational levels (i.e. local, urban, municipal, communities) could contribute to the continued growth of renewable projects, irrelevant of national targets. Such a governance mechanism could include a variety of tools like the introduction of regional and/or municipal funding mechanisms for the development of non-traditional renewable energy projects zones, in the spirit of Catapult Centers in the UK and creative zones. These government and local authorities' sponsored initiatives provide financial incentives, provision of capacity building activities with focus on greenhouse gas emissions reductions, and shared learning between individual projects.
5. Such governance mechanisms could provide vital capacity building opportunities for all EU countries; for example in Bulgaria and Romania there are currently very limited incentives and measures in support of renewable projects, for example the lack of community energy projects; and address the problem of limited domestic support for these projects which we argue is necessary for coalition-building around renewable technologies and the social acceptance of a potential increase in the short term cost of energy. Such a governance mechanism would require an active role for national and EU energy regulators in ensuring consistency in the treatment of non-traditional business models and support their emergence and diffusion. Furthermore, non-traditional business models may cross sector boundaries and include areas that are not regulated. This will require a higher level of regulatory flexibility than currently experienced in most Member States.
6. Our research on the newer Member States (in particular Romania and Bulgaria) has shown that the key mechanism for effective implementation and compliance with the EU's Directive on the promotion of the use of energy from renewable sources (EU 2009/28/EC) has been the binding targets at national level. Before these targets were introduced, the legal transposition alone of previous 2001/77/EC Directive did not have any significant effect in practice in terms of level of investment or growth in the renewable energy sectors.

The result was a case of formal compliance without substantive implementation. Once the targets were negotiated with individual Member States, there was a significant change in the way political elites addressed policy implementation. New and extensive incentives were put in place to promote investment: for example in Bulgaria long-term contracts, set-up grants, and obligatory, zero cost and priority connection to the grid were implemented. In Romania the differentiation of green certificates on the basis of technology, mandatory annual quotas for green energy, and guaranteed priority access to the grid created a thriving market.

7. An under if not completely unused mechanism is that of cooperation mechanisms between Member States and with third countries. The overproduction of renewable energy relative to targets explains why this mechanism is unlikely to be used to meet 2020 targets. Joint projects between member states and third countries have the potential to assist in the meeting of EU 2030 renewable targets whilst developing economic partnerships with neighbouring countries. There is also the option for one member state to provide financial support for a RES project in another member state and count (part of) the project's energy production towards its own efforts. This can be efficient in taking advantage of renewable energy potential and directing funding to where it can be most effectively used.

- *How robust could a governance mechanism be without compromising Member State responsibility for their national energy mix?*

8. The continued use of certain existing governance mechanisms would be key for the European Commission to be able to monitor non-compliance in particular Member States, especially in the case of a new EU-wide binding target for 2030. These included initial National Renewable Energy Action Plans (Directive 2009/28/EC, Article 4(1)) coupled with progress reports every two years (Article 22) which are only running until 2020 and 2021 respectively. Currently, if a member state falls behind its indicative trajectory then it is required to submit an amended national action plan (Article 4(4)). If binding national targets are not going to be used, and we believe they are effective, then it will still be important to regularly measure progress towards the EU target, and offer support where national planning is considered insufficient. National Renewable Action Plans do provide a governance mechanism that is designed with the acknowledgement that there are different, nationally specific, paths towards meeting the Renewable Energy Directive. Member States then retain sovereignty in deciding how to meet the EU's target, whilst offering strong support and guidance where necessary to provide a long-term planning perspective that can otherwise be lacking, and to measure and report on the implementation of plans. The mechanism needs to retain, and even strengthen, the existing 'hard measures' to enforce EU targets and retain obligations for Member States and sanctions for non-compliance in order to incentivise government

focus on the issue, enforce implementation and prevent defection from this EU agreement, as well as to reassure member states that others are carrying a fair share of the burden. These sanctions include the Commission's right to launch infringement proceedings against non-complying member states, and the European Court of Justice's right to impose penalty payments. At present this can take several years before the non-compliance results in sanctions.

Drawing the case studies together: Looking forward:

3. What are the implications of a strengthened EU approach to energy governance? What are the implications of not making swift progress towards a new – and clear – governance system?

9. In the absence of national-binding targets for 2030, coupled with domestic price increases for energy and protest from the heavy industry energy consumers, countries which have already reached their 2020 targets, such as Romania and Bulgaria, have started to dismantle their incentive systems, creating an environment of extreme uncertainty for businesses and the withdrawal of some key investors in renewables. Furthermore, the impact of these developments on the energy-intensive industries has prompted certain Member states (even frontrunners such as Germany) to use feed-in-tariff exemptions which have effectively lowered energy costs for energy-intensive industries. In this context, the coupling of RES targets with the 40% emissions reduction target is important but not sufficient for keeping RES investment on the agenda. For example, the new member states have benefited from EU-wide greenhouse gas emissions targets and the solidarity principle by not having to make any cuts due to the collapse of their industry compared to 1990 emissions levels. Moreover, due to the current economic crisis, investment in research and new technology have been cut across the EU, even in Germany, which is the third largest wind energy market after China and the US.

6. Should a new governance framework be enshrined in legislation?

10. A clear and coherent policy framework is essential for investors in the RES sector. Most companies investing in renewables across the EU are also investors in other types of energy and their move to renewables is partly due to the attractiveness of the incentive systems, prompted by the national binding targets. As incentive systems are being dismantled across the EU, further commitment from the business sector has been linked to a stable legislative framework, enforceable EU-level targets and the linking of energy and climate change policies.
11. Newer Member States like Bulgaria and Romania have limited support and capability to consider greenhouse gas emissions as part and parcel of energy governance at the national level. In many respects, greenhouse gas reduction policy is considered an external issue introduced by EU Directives and Policy. It is then important that a new governance framework be enshrined in EU legislation and transposed to the national

level. In newer Member States EU legislation, especially RES Directive played a decisive role in the development of renewables like wind and solar power. However, although these countries were quick to transpose EU Directives, they tend to lack sufficient domestic support for these energy sectors and a lot of the legal and financial incentives for wind and solar were quickly removed once the targets for 2020 were achieved. Therefore the continued development of these sectors and learning about the reduction of greenhouse gases through energy policy in these countries will greatly benefit from “hard” legislation, such as direct targets.

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